Our Public Lands

Fall 1978

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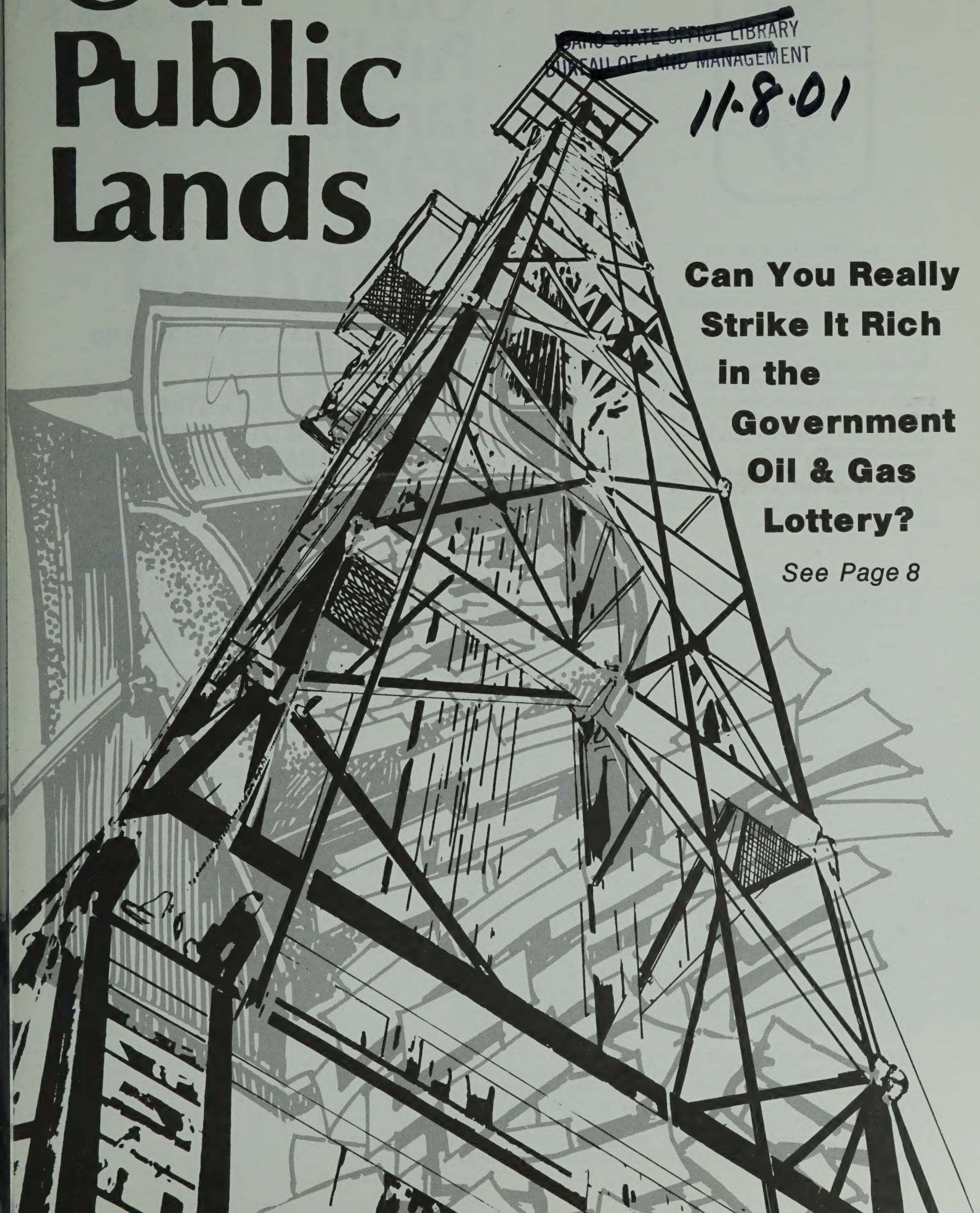

Can You Really Strike It Rich in the Government Oil & Gas Lottery?

See Page 8

March 3, 1849

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

As the Nation's principal conservation agency, the Department of the Interior has basic responsibility for water, fish, wildlife, mineral, land, park, and recreational resources, Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

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Our Public Lands

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A New Era for Rangeland Management

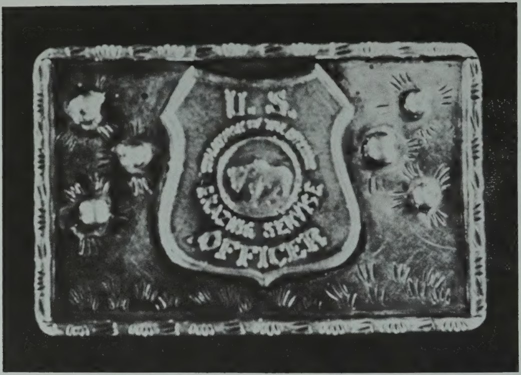
New Interior Regulations Provide a Tool for Better Management of Western Rangelands

On July 5, 1978 the Department of the Interior adopted new grazing regulations for public lands administered by the Bureau of Land Management. These regulations are the first major revision of grazing regulations in 42 years.

THE OLD

The tradition of open range and free grass that had been the cornerstone of the development of the western livestock industry from the post Civil War era came to an end on June 28, 1934 when President Franklin D. Roosevelt signed the Taylor Grazing Act into Law. That Act, still in effect, provides the legal basis for the regulation of grazing on public lands today.

Shortly after the Act was passed members of state advisory boards met in Washington and posed for this picture with Interior Secretary Harold Ickes (front row 6th from the left) and Ferry Carpenter (front row 8th from left) who was the first Director of Grazing, appointed on September 12, 1934. In his testimony before Congress Ickes had estimated that he could administer the new Act for $150,000 a year.



In passing the Act Congress authorized the establishment of a new Federal Agency, the U.S. Grazing Service, to administer the new law. The Grazing Service was a single purpose agency created to serve a single constituency, the western livestock industry. In 1946 the functions of the Grazing Service and the General Land Office were combined into a single agency, the present Bureau of Land Management.

The Taylor Grazing Act authorized the Secretary of the Interior to appoint local advisory boards to advise the Grazing Service about matters in the individual districts. The Act provided for specific portions of the Federal range to be allotted to the use of individual livestock operators. It fell to the local advisory boards to make these allotments and to attempt to adjust livestock use to the carrying capacity of the range.

To qualify for an allotment, a person had to be engaged in the livestock business and own private property (base property) or water rights adjacent to the public lands. Terms and conditions of the grazing privilege included numbers of livestock the operator could turn out onto the public land and seasons of use.

With a new Agency and a new law in hand, Interior did not adopt implementing regulations until March 2, 1936. Known as the "Rules for Administration of Grazing Districts," these regulations filled 9 typewritten pages. In the last 44 years the Law and the regulations have been amended a number of times, but until June 5, 1978 there was no major change in the basic regulations.

By the 1970's the old regulations had made significant accomplishments. The Federal range was allotted among individual operators, physical improvements in the form of fencing, watering facilities, etc had contributed to better conditions. But changing public attitudes, new uses of public land and new laws had outdated the old regulations and made some of their requirements obsolete.

THE NEW

Efforts to revise the grazing regulations started in 1971, but it was not until July 28, 1976 that the Department was ready to publish proposed regulations. Publication was followed by a period for public comment. After all comments had been received, BLM staffs set about to evaluate comments so that appropriate changes could be incorporated into the final regulations. It was during this period of comment and evaluation that Congress opened a new ball game by passing the Federal Land Policy and Management Act on October 21, 1976.

The new Law did not repeal the Taylor Grazing Act, but certain sections of the new Law did pertain to grazing on public land and still other sections impacted grazing programs. The new Law made it necessary for the Bureau to make significant changes in the proposed grazing regulations.

BLM personnel set about the job of writing a new proposal. This was published in the Federal Register on July 8, 1977. After a period for comment and evaluation, Final Regulations were signed by Assistant Secretary Guy Martin on June 28, 1978. They appeared in the Federal Register on July 5 and became effective on August 4, 1978.

SO WHAT HAS CHANGED

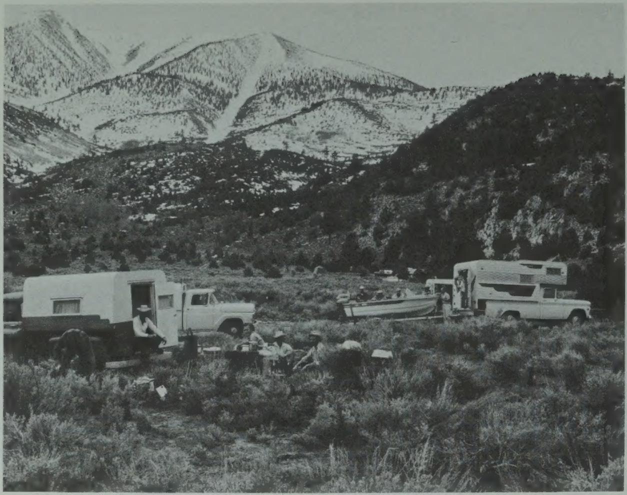
Under the new regulations, most operators will receive 10-year permits. Short term permits will be issued on a case-by-case basis, and only for the following reasons:

The land is scheduled for sale or another type of disposal.

There are plans to use the land for a public purpose not compatible with livestock grazing.

A period of less than 10 years is in the interest of sound land management.

Livestock operators were required to devote a portion of their private land (base property) to growing feed for their livestock. This requirement has now been eliminated they could graze on their allotment of public land under the old regulations. If a good season or prudent management caused the land to produce more livestock forage than anticipated, the operator might have to compete with other operators for the right to make use of the extra forage. Under the new regulations operators assigned to an allotment have a preference right to use the additional livestock forage.



LIMITATIONS — RESTRICTIONS — AND NO NOs

Ten year permits are conditional. Although the permit states how much use the operator is normally entitled to, the amount of use can be adjusted to meet conditions or land-use decisions that may arise during the life-time of the lease.

Permits may be cancelled, suspended or modified as required by BLM land use plans, applicable law or because of abuse of the grazing privilege.

The regulations specifically prohibit:

Unauthorized range improvements, or non-compliance with the specifications and terms of the authorization.

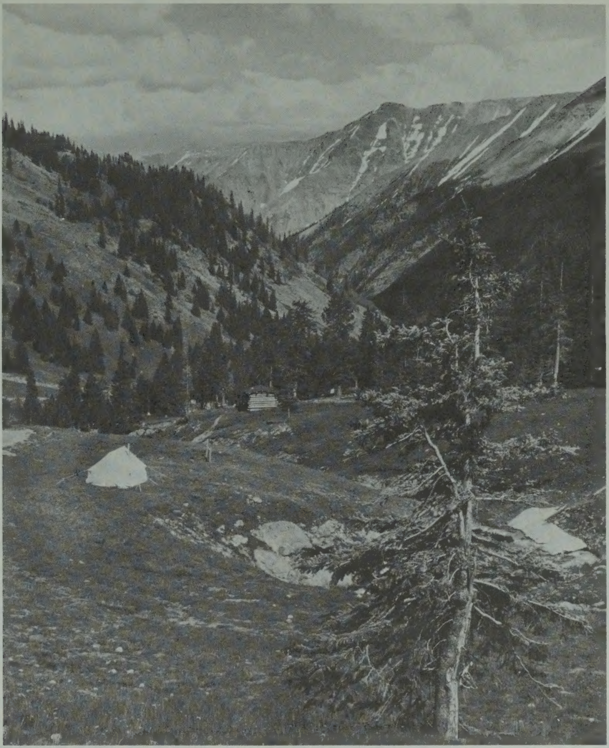
Littering the public lands.

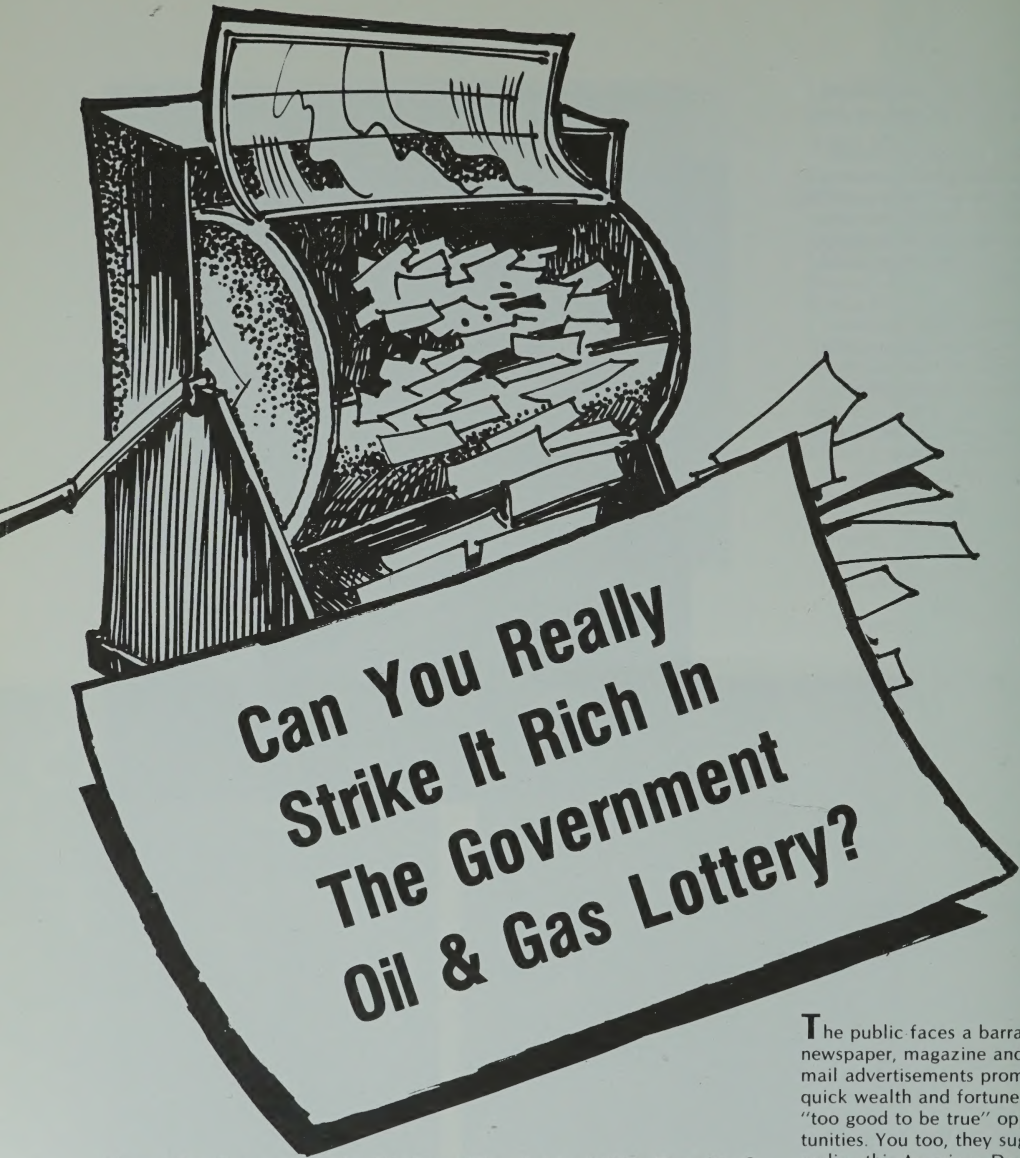
Making a false statement pertaining to the grazing privilege.

Violation of state or Federal laws or regulations pertaining to wild horses and burros, marking of livestock, health and sanitation, environmental quality, wildlife or plants or applicable state law.

The regulations make operators responsible for damage resulting from trespass or other unauthorized grazing on public lands.

Criminal penalities can be evoked for the violation of state or Federal conservation laws.





Can You Really Strike It Rich In The Government Oil & Gas Lottery?

How Do Promoter's Claims Stack Up With Reality?

Haywood Meeks
Office of Public Affairs

The public faces a barrage of newspaper, magazine and direct mail advertisements promising quick wealth and fortune through "too good to be true" opportunities. You too, they suggest, can realize this American Dream for the asking — and for a price.

Perhaps you have been among those invited to take advantage of such an opportunity by entering a drawing for oil and gas leases on Federal lands. The ads say: write for details, or send a check to cover the cost of a filing fee and other services, and have your name entered in the drawing.

Is it really possible to strike it rich? How slim are the odds and what are the risks? What are the facts?

The purpose of this article is to acquaint you with the reality and procedure of the Bureau of Land Management's Simultaneous Oil and Gas Leasing System, commonly called the "Government Oil and Gas Lottery."

There are two types of leases issued for oil and gas exploration and development on lands owned or controlled by the Federal Government: *competitive* and *noncompetitive*. *Competitive* leases are issued for Federal lands within the known geologic structure of a producing oil and gas field as determined by the U.S. Geological Survey. Such leases are issued to the qualified person who offers the highest bid.

This article is about *noncompetitive* leases. This kind of leasing is done through the Simultaneous Oil and Gas Leasing System. Lands that are not within any known geologic structure of a producing oil and gas field, commonly known as "wildcat" lands, are subject to leasing to the first qualified person making application for a lease. Such a lease is termed *noncompetitive* since the applicant is entitled to the lease without competitive bidding. Most Federal oil and gas leases are obtained through noncompetitive leasing procedures.

When noncompetitive leases expire, terminate or are relinquished or cancelled, the land becomes available for re-leasing. Before 1960, these tracts were offered on a firt-come, first-served basis. When particularly promising tracts were due to be posted as available long lines formed at the land offices. Fights often broke out, disrupting business and, in some instances, injuring employees trying to control the crowds. To establish an orderly and fair system of awarding these noncompetitive leases, the simultaneous oil and gas lease drawing was developed.

Almost all of the tracts offered for noncompetitive leasing are in the Western States where most of the public land is located. These are the States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. On rare occasions, a few tracts in Washington and Oregon are offered.

A small number of tracts in the Midwest and East are put up for noncompetitive leasing. These tracts are primarily in Alabama, Arkansas, Florida, Louisiana, Michigan, Mississippi and Ohio.

Noncompetitive leasing of public lands in Alaska cannot occur until the lands have been conveyed to the Alaska Natives and apportioned among various Federal agencies in accordance with the Alaska Native Claims Settlement Act. Conveyance and apportionment will not be completed for several years.

Each State Office of the Bureau of Land Management prepares and posts a monthly list of lands within its jurisdiction that are available for re-leasing. (BLM State Offices and their areas of jurisdiction are listed on Page 23). These monthly lists may be obtained from the State Offices by mail for a small charge, usually $2 to $5 per list. There are no drawings held in the Washington Office.

If any lands are available for re-leasing, the BLM State Office posts its list at 10 a.m. on the third Monday of the Month. Applications for leasing any of the listed tracts are accepted until 10 a.m. on the following fifth working day. All applications received during this time are considered to be filed at the same time. If more than one application is received for a given tract, a drawing is held to decide who will get the lease.

Federal oil and gas leases may be obtained and held by any citizen of the United States. They also may be issued to legal guardians or trustees in behalf of minors. Associations of citizens and corporations organized under the laws of the United States or of any State also qualify.

Aliens may not hold any interest in leases, except they may own or control stock in corporations holding leases if the laws of their country do not deny similar privileges to citizens of the United States.

No person, association or corporation may hold, own or control oil and gas leases — competitive and/or noncompetitive — for more than 246,080 acres in any one State.

Applications may be filed on any of the parcels shown on the monthly list posted in the BLM State Office. The land applied for must be identified by the parcel number shown on the list.

Each offer to lease must be submitted on an official drawing entry card (Form 3112-1), which is available free from any BLM State Office. The card must be fully completed and signed and must be accompanied by a $10 filing fee, which is not refundable. An applicant is permitted to file only one entry card for each numbered parcel on the list; however, an applicant may file on as many other parcels as he or she wishes. Tract sizes range from under 40 acres to a maximum of 2,560 acres.

Following the 10 a.m. cutoff on the fifth working day after the monthly list is released, a public drawing is held at the BLM State Office to determine the priority of the offers. Three entry cards are drawn for each parcel, and the order in which they are drawn fixes their order of priority. The successful offeror is notified by the Bureau and given an opportunity to pay within 15 days the annual rental for the first year of $1 an acre or any fraction of an acre. The second the third entries drawn are held by the Bureau for consideration in case the applicant drawing higher priority is disqualified.

Unsuccessful applicants are notified by the return of their entry cards.

How does an applicant determine which of the offered parcels are worth considering? Of course, the intelligent leasing of oil and gas lands should be based on considerable geological knowledge of the oil and gas potential of the land. Unfortunately, this information is not available to most prospective buyers.

Offers for non-competitive oil and gas leases are received in appropriate BLM offices. No leases are processed in the Washington Office.

Applications are checked for duplication and sorted according to individual tracts. When more than one offer is received for a given tract, a drawing is held to determine who will be awarded the lease.

The Bureau of Land Management does not classify the land parcels offered on the list of available lands for oil and gas leasing as to whether or not they are in the path of development or productive drilling or whether or not they may have potential value. Any classification, interpretation or evaluation of a parcel's value or potential value must be derived solely by the individual filing on or leasing the parcels. There is no government agency that makes this classification.

Many applicants use a "filing service" to aid in parcel selection. These services are private concerns and are not endorsed by, or connected with BLM or any other agency of the Federal Government. Some firms, for a fee, evaluate the available parcels on the basis of geological and market information and offer maps and information on oil activity in the area of the tracts they recommend. Other services may charge a fee only for selecting tracts from the lists of available lands and mining entry cards to BLM.

Be wary of filing services that paint an overly optimistic picture of your chances of making money. Consider that these firms may file for hundreds and even thousands of clients on the limited number of desirable parcels, and the more interest these firms can generate in drawings, the less chance each individual has of winning.

The names of firms or individuals that specialize as filing services may be located through business or professional associations, such as local bar associations; through oil and gas trade publications, chambers of commerce, State industry development agencies, and from friends who have used similar services in the past. Some firms also advertise in business and sports magazines, through the mail, and on the business pages of newspapers. They sometimes are listed under the heading "Federal Leasing Services" in the yellow pages of telephone directories. Most have headquarters in the West and Southwest.

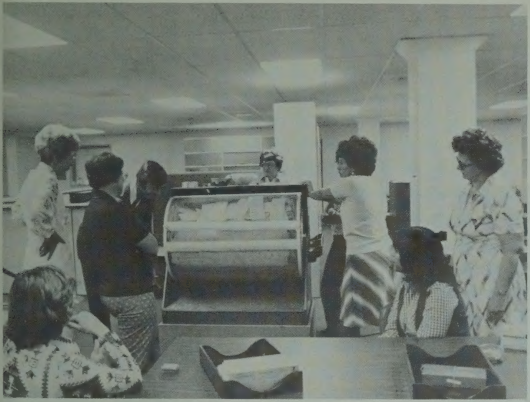
In evaluating a filing service, your best bet, of course, is to talk to someone who has dealt with the firm or individual. If this is not possible, contact the Better Business Bureau in the city where the filing service is located, or the local or State consumer office. State consumer offices are located, in most cases, in the State capital. Local offices are listed in the telephone directory under the city or county government.

The lease grants the lessee the exclusive rights to explore and drill for, extract, remove, and dispose of oil and gas deposits, except helium gas, that may be found in the leased lands. Such leases are issued for a 10-year period and so long thereafter as oil and gas is produced in paying quantities. The oil and gas lease conveys no surface rights other than the right to develop those resources on the leased land. The lessee cannot build a house on the land, cultivate the land, or remove any minerals other than oil and gas from the leased land.

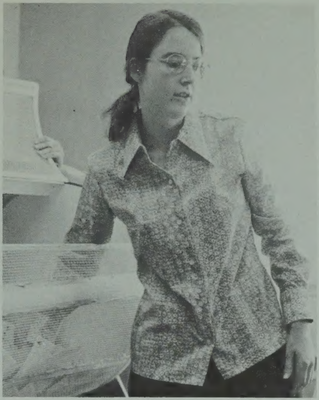
Special restrictions on use of the lease tracts for oil and gas development are set forth in the list published each month. The leases are also subject to the condition that an environmental assessment will be made before permission is granted to conduct any drilling activities. It is the Bureau's responsibility to assure that such an operation is environmentally acceptable and will not adversely affect or interfere with the use and administration of the land for other purposes.

Before any drilling operation can commence, the lessee or his operator must furnish a bond of $10,000 which is conditioned upon compliance with all the lease terms, including protection of the land during operations from fire, pollution, etc., as well as plugging any abandoned wells.

The value of oil and gas leases varies greatly. In certain cases,



All offers for a given tract are placed in a drum and the drum is turned to insure thorough mixing. The Bureau often receives several thousand offers for a single popular lease tract.



Taking care not to look, an employee draws three cards for each tract. The person whose card is drawn first has first right to the lease. The second and third cards represent alternates who will be offered the lease in turn if the first applicant is disqualified or fails to exercise his option.

noncompetitive leases have brought substantial profit to the winners. These are leases in "hot" areas' that is, they were near known oil and gas development. Generally, however, these leases average only a few dollars per acre if resold. Most leases have little or no value.

Holders of noncompetitive leases required through this system usually do not conduct their own drilling operations. The reasons for this are the general lack of experience with oil and gas development and the lack of the tremendous capital risk which drilling operations require. The usual motive in obtaining a lease is to make a profit by selling it to an oil company or independent contractor.

To sell the lease, the holder must find a company that is willing to risk capital on the chance that there is oil and gas beneath the surface. If the lease is in a "hot" area, a company will probably come to the lessee; if the lease is more speculative, the lessee may have to search out a buyer. A company willing to buy will usually pay a lump sum for the lease. In some cases, the lessee may retain a royalty interest in possible future production from the lease.

All assignments and transfers of leases must be approved by the Bureau of Land Management, and the assignee must be as qualified to hold the lease as the original lessee.

A lease on which there has been no discovery of oil or gas in paying quantities will expire at the end of its 10-year primary term. Also, any lease which does not contain a well capable of production will automatically terminate if the lessee fails to make full payment of the annual rental of $1 per acre to the proper BLM office on or before the anniversary date of the lease. The land in such terminated leases will not be available for re-leasing until posted on a subsequent monthly list.

The owner of a lease also may surrender the lease in whole or in part by filing a written relinquishment with the proper BLM State Office. A relinquishment takes effect on the date it is filed. The lessee must plug any abandoned wells and perform other work as may be required by the U.S. Geological Survey to place the leasehold in proper condition for abandonment.

A lease may be cancelled administratively by the U.S. Interior Department for failure of the lessee to comply with the requirements of the Mineral Leasing Act, the applicable regulations, or the terms of the lease, if a valuable deposit of oil and gas has not been discovered on the land. Leases for lands where valuable deposits have been discovered may be cancelled only by judicial proceedings.

Any person who considers entering the oil and gas drawing should keep certain facts in mind:

* The land offered for leasing was formerly included in oil and gas leases that expired, terminated or were relinquished or cancelled.

* The land involved is not recognized as being within a known geological structure of a producing oil or gas field.

* Use of a "filing service" is not necessary. You may enter the drawing on your own.

* Your offer to lease is strictly a gamble. Since a very large percentage (90%) of the tracts won are never drilled on your parcel may not have any potential for oil and gas even if you win the drawing.

* Your chances of winning the drawing may be remote. In 1977 for example, roughly 2.5 million people filed for about 9,000 tracts.

Additional information, free entry cards, and cost of monthly listing of lands available for leasing may be obtained from the appropriate BLM office listed on Page 23.

LEARNING

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Beautiful but Deadly -- Tans

Tansy Ragwort is an attractive weed that invades western pasture lands. If livestock eat it over a relatively short period of time, the diet invariably proves fatal. The weed covers an estimated 500 thousand acres of pastureland in Oregon and Washington.

Warren Sandau
&
Don Smurthwaite
Oregon State Office

Tansy Ragwort — the name could be that of some mythical character from a Tolkein novel. But to those familiar with toxic plants, there is nothing mysterious or intriguing about the tall, yellow-flowered plant that is spreading rapidly throughout the Pacific Northwest, a plant that caused an estimated 10 million dollars in damages in Oregon alone last year.

Most of those damages were incurred by livestock owners who had the misfortune of grazing animals on land infested by Tansy plants. Tansy ragwort contains six different alkaloids, which accumulate in the liver. Ingestion of tansy by livestock invariably ends in liver failure or weakens the animal to the point where other diseases can gain a strong foothold. All growth stages of Tansy contain about the same level of alkaloids; it is equally deadly as a new or mature plant.

Fortunately, Tansy is not very tasty. It will be eaten by livestock only when other forage is insufficient, however, poisoning often occurs when small Tansy seedlings are mixed with desirable grasses, or

TO LIVE WITH
NSY

gwort is Yielding to Biological Control

Janet Bocci, an employee of the Oregon State Department of Agriculture spends her summers collecting larvae of the Cinnabar moth. The larvae are used as a biological control of the noxious weed. They feed only on Tansy.

in hay, and the grazing animal don't distinguish between the toxic weed and other forage.

The lifecycle of Tansy is generally two years. Seed germinate in the fall, form a rosette the next year, and blossom the following year. In bloom, Tansy is easily noticed. The flowers look like daisies, and the leaves are from five to nine inches long, while the plant itself may grow to a height of three to four feet.

"It's a pretty plant," confessed one veteran Tansy fighter. "I even cut some and brought it to the office and put it in a vase."

Tansy reproduces from seed, and a single Tansy ragwort may produce as many as 150,000 seeds. Most fall within a few hundred feet of the parent plant, but wind and water may carry them for great distances. If not controlled, Tansy will invade deteriorating pastures or logged areas. It takes a relatively short time for it to take over once it appears.

Tansy ragwort has been a menace to livestock in the Northwest since it first appeared in Oregon in 1922. According to one theory, tansy seed arrived in the sand and gravel used as ballast by ships sailing from Europe. Tansy first appeared in the valley of the Coast Mountain Range and has since spread throughout the western portions of Oregon and Washington. Earlier in the century Tansy was mostly confined to pastureland, but in recent years it has shown a remarkable, although disconcerting, tendency to adapt to most any kind of disturbed land and to any climate. It has been known to exist in arid portions of Asia and survive in temperatures as low as minus 20 degrees Fahrenheit. Areas that have been altered by the activities of man are especially prone to invasion by Tansy.

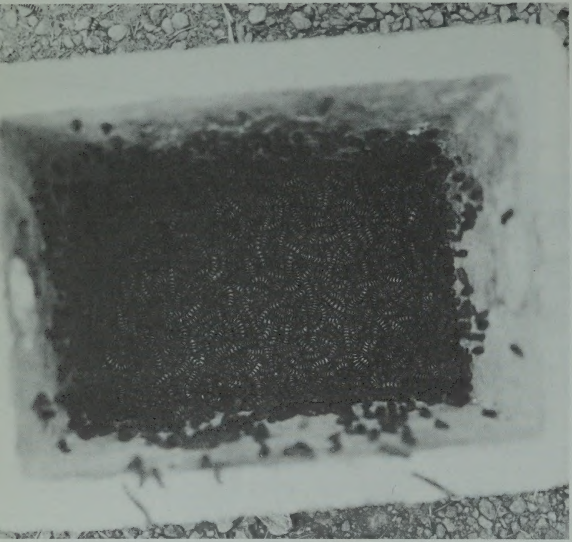
"The spread of Tansy has been rapid since the 1950s," Warren Sandau, range conservationist for the Bureau of Land Management says, "this corresponds to the time that activities that disturb the surface of the soil, such as logging and road construction became commonplace."

A frustrated landowner who lives near Portland said, "We've got more Tansy this year than last, and last year we tried to pull it out by hand. We take pickup load after pickup load off our land and it still keeps coming back."

A similiar plight plagues other owners of land and livestock. Tansy pulling control efforts often have little effect and chemical spraying isn't feasible for large areas of wild land that is infested by the weed.

The fight to control Tansy isn't hopeless, however. While the answer to the problem of control doesn't seem to lie in expansive pulling or spraying operations, the solution may come in the form of a peaceful, inch-long caterpillar of the cinnabar moth.

The moth, like Tansy ragwort itself, was introduced to the Pacific Northwest from Europe. The cinnabar moth is an innocuous little insect and wouldn't attract much attention were it not for one sterling quality — its larvae feed exclusively on Tansy ragwort. With this fact in mind, BLM teamed up



After thirty minutes of work, Ms. Bocci can collect enough larvae to establish several new colonies of the moth. She estimates that about 1,000 larvae are needed per colony.

with the Oregon State Department of Agriculture in 1974 to establish cinnabar moth colonies throughout the state. Sites for the colonies were located with the aid of NASA's remote sensing satellites. They were used to photograph Oregon from space and relay information to computers which pinpointed the heaviest concentration of the weed. Larvae are collected by workers in the late spring and immediately released in areas located by the satellite photos. The larvae, which are in the form of yellow and black catepillars, feed on the plant and keep it from going to seed. If the caterpillars have a hearty appetite, they may kill the plant outright.

When fall arrives, the catepillars form hard cocoons and pass away the winter in a dormant state as the ground is sheltered with leaf litter. When spring rolls around, and adult cinnabar moth emerges, and three weeks later eggs are laid on the underside of the Tansy leaf. Thus the cycle is again underway.

The process of using a predator to curb an unwanted plant or animal's spread is called "biocontrol." It simply takes advantage of nature's own system of checks and balances.

Sandau is a firm believer in biocontrol as the best answer to the Tansy ragwort problem. "It is the only alternative that is environmentally acceptable and economically practical," he said.

At the beginning of the year releases of cinnabar moths had been made in more than 200 townships in Oregon. Another 100 sites have been selected for release later in 1978. Most of the townships selected for release are on BLM land.

The program is faring well. Sandau tells of two pastures located in Coos County, near the Southern Oregon coast. Both pastures consisted almost entirely of Tansy. Several years ago a colony of cinnabar moth larvae was introduced into one pasture. When a check was made two years later, the pasture that had not been treated was still infested with Tansy. The other showed just a trace of the plant remaining, thanks to a flourishing colony of cinnabar moths.

"Most people are pretty well satisfied with the job we are doing on BLM-managed land," Sandau reported.

The chief drawback to the cinnabar moth control program is that the process is time consuming. It takes a minimum of five years to establish a colony, Sandau said. Yet a five-year investment provides a permanent control method if the release of the larvae is successful, he added.

The cinnabar moth is not the only insect used to fight Tansy. Another promising species is the flea beetle, a one-eighth inch insect that emerges from the soil late in the spring and feeds off Tansy foliage into the summer. A period of summer dormancy

Here, five years after a colony of moth was established, they have reduced a once thriving field of Tansy to stubble.

Once established, the larvae attack individual plants with a voracious appetite.

follows. This lasts until the shorter days and cooler temperatures bring a new period of feeding and signals the start of the egg-laying season, which may continue well into the winter. Most of the eggs hatch the third week after being laid. Larvae then move toward the root crown of the plant where they feed. This causes the plant to lose its reproductive capacity.

"We think the flea beetle will be another tool in the control of Tansy. Evaluation of the reports to date have been very encouraging," Sandau said.

A final biocontrol insect being tested is the seed fly whose larvae feed on Tansy seed. This also limits the reproductive abilities of the weed. The seed fly also shows promise, "but not enough information is in to make a judgment," Sandau said. Time is essential in the control of Tansy ragwort. It takes time to establish cinnabar colonies, to allow for proper evaluation of the potential of the seedfly, and, to a lesser degree, the flea beetle. Time is also needed to develop the best method of releasing biocontrol insect colonies. Until the biocontrol program is fully implemented, Tansy is likely to spread. Eastern Oregon, a rich grazing area for livestock, does not yet have a significant Tansy problem. But sightings of the plant have increased substantially there in the last few years.

How much time is needed to control Tansy?

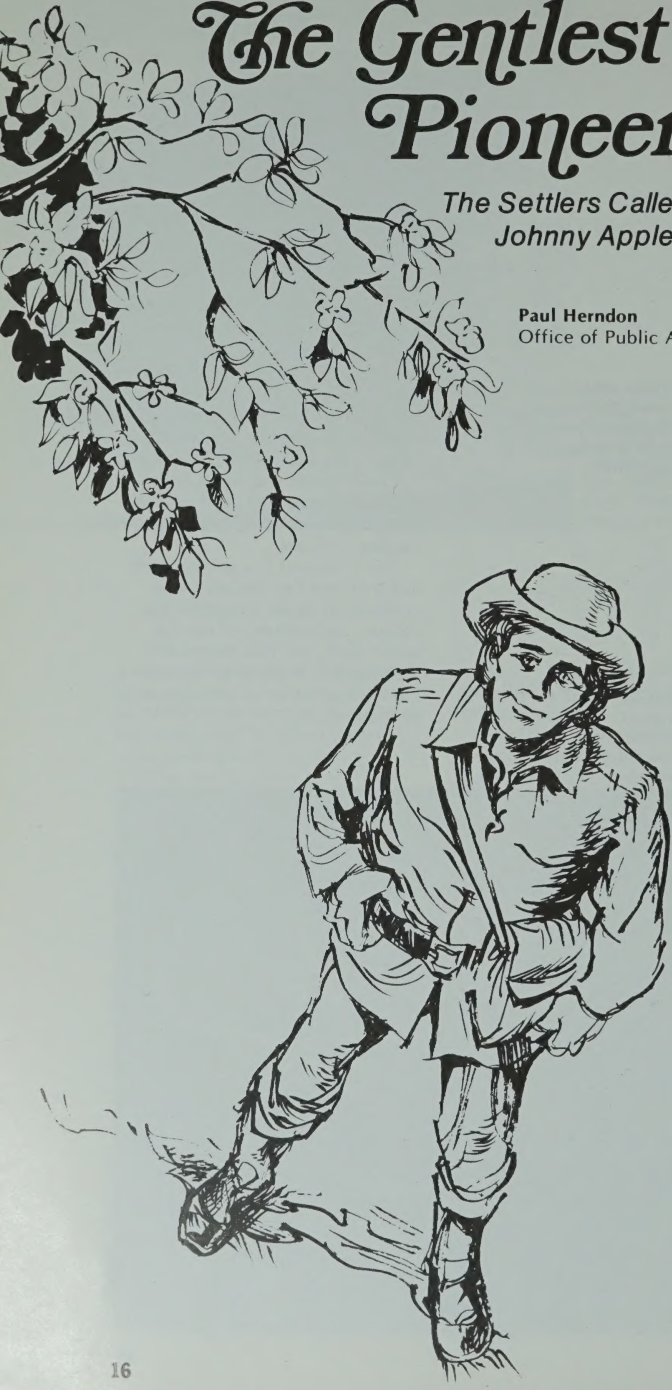
"If we're able to continue the program we're now involved in for another four or five years and then continue on a maintenance program for another 10 to 15 years, we will make substantial inroads toward the control of Tansy," Sandau promises.

"We are looking to control Tansy, not erradicate it," Sandau explains. "Like it or not, Tansy is here to stay. Eradication of the weed is not the aim of bio-control. What we are trying to do is minimize the loss of livestock and balance the environment."

"Since Tansy will never be eradicated, we must learn to live with it and how to manage it," Sandau explains.

Tansy ragwort is a serious problem and looks as though it will continue to be so. But given the culinary preferences of the cinnabar moth, the flea beetle and the seed fly, learning to live with Tansy may not be as difficult as it once appeared.

The larvae totally destroy the plant. Stalk, crown and flowers are eaten by the larvae.



The Gentlest Pioneer

The Settlers Called Him Johnny Appleseed

Paul Herndon
Office of Public Affairs

Of Jonathan Chapman it was said, "He never fought a battle, never founded a town, but the memory holds fast to the gentle wanderer who came at last to rest where Old Mad Anthony had scourged the Indians."

He was born in Massachusetts and first floated down the Ohio River in 1801.

Johnny believed in God, good seed, and fertile soil.

He followed the religious teachings of Immanuel Swedenborg, but he never built a church. For forty years he wandered through the Ohio Country looking for good soil in which to plant his apple seeds.

But he never claimed an acre for his own.

He journeyed in the wilderness without fear — accepted by Indians and white settlers alike. The tale was told that one night he crept inside a hollow tree to find it already occupied by a bear.

Side by side they slept, and at the dawn parted on good terms.

Maybe Johnny was a wee mite touched, but it was a warm and wonderful insanity. Whenever, by chance, Johnny came upon a cabin near nightfall, he gladly accepted the proffered hospitality, and leaving on the morrow, he settled his bill by tearing a sheet from one of the religious tracts he always carried and left the precious bit of reading matter in return for his food and lodging.

Wherever Johnny had passed the countryside bloomed white in the spring.

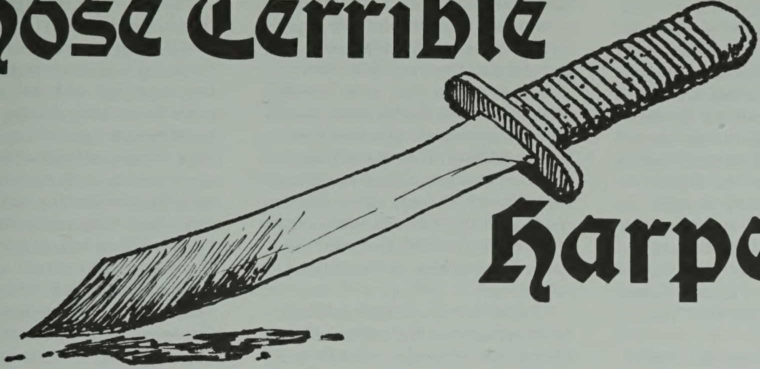
Because of the orchards he planted, the settlers called him Johnny Appleseed.

Eighty years after he died, somewhere in Allen County, Indiana, the poet Vashel Lindsey wrote him an epitaph:

"In the four-poster bed Johnny Appleseed built
Autumn rains were the curtains, autumn leaves the quilt;
He laid him down sweetly and slept through the night
Like a stone washed white
There by the doors of old Fort Wayne."

Two Demented Brothers Preyed on the Frontier

Those Terrible Harpes



Once a family had crossed over the mountains to take up life on the frontier, the next hour of life could never be taken for granted. Whether on the trail, in his own cabin, or tending his crop in a forest clearing, disaster could strike the settler or his family without warning and with lethal brutality.

In addition to the ever-present threat of Indian attack, the isolation of the average frontier family made danger from the elements, accident, or sickness things to be constantly dreaded. A mishap that would have been of small consequence in a settled community could be fatal to a man or a family all alone on the frontier. But in addition to all those things, the settler often had good reason to be wary of any stranger who happened to come his way.

The frontier was the outlaw's element, and murder and robbery were common occurances among the settlements. The frontiersman was, by nature, a man who was quick to resort to his fist, his knife, or his gun to settle any real or imagined grievance. Such a man could easily turn outlaw when circumstances nudged him in that direction.

A case in point is Samuel Mason. Mason was a veteran of the Revolution and had a good war record. Later he settled in Kentucky where he became a respected family man in the community. When his daughter was forced to marry an unwelcome suitor, Mason appeared to put the best possible face on the affair and the ceremony was held in his own home. But that same night, he and his sons murdered the unwelcome son-in-law. Thereafter, Mason was a wanted man and spent the rest of his life as an outlaw who committed many robberies and murders.

The frontier also provided a natural refuge for men wanted for crimes in the established communities of the east, and the wilderness provided an ideal setting for such a man to continue his life of crime. A man who traveled west could be expected to drop from sight and not be heard from for years. If, by chance, he was murdered, he was rarely missed in time for his friends to have any hope of apprehending his killer.

The pioneer's own reticence was another factor that favored the outlaw. On the frontier the settler was inclined to concern himself only with those matters that had a direct bearing on his immediate welfare. If a thief stole his neighbor's horse, he became more watchful of his own animal but was rarely inclined to leave his work to pursue the thief.

This attitude had a certain justification. Outlaws were usually pragmatic men who soon learned that the average settler had little worth stealing. He also realized that the good will of a settler living in an isolated cabin could be an asset to a man on the run. For these reasons most outlaws were inclined to let the settler alone, and many even courted the favor of those who could be counted on to keep a tight lip.

Mounted on a good horse and wearing good clothes, the outlaw was often a hero-figure to a lonely pioneer family faced with the monotony of daily life. Rarely did the outlaw give anything of consequence to the poor, but they did steal from the rich, and that fulfilled at least half of the Robin Hood image. To the poor settler, squatting illegally on land claimed by some western speculator, it was easy to see the outlaw as a folk hero.

Robbery in the wilderness was often a prelude to murder. From the outlaw's point of view, this was merely being practical. There was always the possibility that a live victim would turn up later to accuse and testify against him in court, but, as the saying goes, "dead men tell no tales."

John Muril often boasted that he never left a victim alive and lived

Paul Herndon
Office of Public Affairs

to a ripe old age. Hare and Mason took mercy on a few of their victims and lived to regret it. To men of this stripe, killing was a necessary ingredient of survival.

But to a few, like the Terrible Harpes, the killing became an end within itself. In the presence of this kind of outlaw, no settler, no matter how poor his purse, was ever safe. The Terrible Harpes were two brothers — Micajah and Wiley Harpe. They were dark visaged men with dark curley hair. Because of the differences in their sizes, Micajah was known as "Big" Harpe and Wiley as "Little" Harpe. Collectively they were the "Terrible" Harpes.

They came from North Carolina where their father had been a Tory who had scourged his neighbors for the King. When the British were driven from the Colony, the Harpes had to flee for their lives. Some claim that throughout their depredations they retained a strange devotion to the English Crown.

Others tell us that after leaving North Carolina the brothers joined a band of Indians who had been outlawed from their own tribe. (Perhaps this explains their passion for violence.) At any rate, they appeared on the Tennessee-Kentucky frontier about 1797 and soon became the scourge of the settlements.

The settlers soon learned that robbery was not the motive for their crimes. Money, expensive clothing and other valuables were often left behind, while their victims showed evidence of senseless torture.

They were also unpredictable. At times they were incredibly clever in escaping from jail or in slipping from sight in the forest without leaving a sign of their presence. At other times they displayed stupid indifference toward capture. Once they were captured when their pursuers found them setting meekly on a log beside the trail. A few days later they made an escape from jail that would have aroused the envy of Houdini.

Traveling with the Harpes were two sisters — Susan and Betsy Roberts. Then, in Knoxville, Tennessee, Wiley was attracted to a girl named Betsy Rice. Contempories say she was rather attractive. Betsy's father was a preacher who insisted on a proper wedding, and performed the ceremony himself. Thereafter, Betsy Rice was a member of the Harpe entourage.

The reputation of the two brothers became so fearsome that the mere sight of them often caused strong men to lose their courage. Once after a particularly heinous crime, a posse set out in pursuit along a trail. Riding hard for a few miles, they suddenly saw the Harpes coming to meet them as they, for some unfathomable reason, backtracked along their own trail. The unexpected encounter so unnerved the posse that they not only refused to make any attempt to arrest the outlaws, but timidly rode several miles before turning back in the hope that the ruse would keep the Harpes from suspecting that they had been chasing them.

On another occasion a posse was beating the brush after the Harpes had disappeared in the woods. Suddenly Wiley rose up from a clump of brush and stood facing the men who were after him. This awkward confrontation was solved to everyone's satisfaction when the posse ran in one direction and Wiley took off in the other.

One of the Harpes' favorite disguises was to pose as circuit-riding preachers. In this disguise, they would stop at a settler's cabin to pray and ask if there was any news as to the whereabouts of those Terrible Harpes. Whether the settler lived or died on such occasions seemed to depend entirely on the mood of the two brothers.

Once the Harpes joined the outlaws inhabiting Cave-in-the-Rocks. This was a cave in a high bluff overlooking the Ohio River. It served as headquarters for river pirates who preyed on boats floating down the River. To a man these were remorseless murderers. Yet the senseless cruelty of the Harpes soon became more than even these outlaws could stomach, and the Harpes were expelled from the hideout.

Retribution finally came to the Harpes after they killed the family of a man named Stegall. Some suspect that Stegall was a confederate of the Harpes, but, if he was, it afforded no protection to his family.

On this occasion the brothers appeared at the door of Stegall's cabin at a time when he was away from home. They were recognized by Stegall's wife, but whether she knew them as outlaws or merely as men her husband did business with can never be known. At any rate she invited them to come inside and wait until her husband returned.

Later that afternoon a third man came to the door looking for Stegall. He was also invited in, and the Harpes were introduced as preachers. For a while the men sat around the fire talking about the crimes of the Terrible Harpes, but as the afternoon wore on, all became drowsy. Mrs. Stegall then suggested that the men climb up into the cabin loft and take a nap. They all did so, but the snoring of the third man disturbed the Harpes, and in one of their typical rages, they split his skull with a hatchet.

With their blood lust aroused, they climbed down from the loft and slaughtered Mrs. Stegall and her children and set fire to the cabin.

Stegall came home a few hours later. He seemed to know just whom to blame. He gathered a posse and set out after the Harpes. In the meantime the Harpes had joined up with their women and had overtaken another potential victim. They were just about to kill him when the posse came into sight back along the trail. Releasing their intended victim, who must have counted himself the luckiest man on the western frontier, the Harpes fled from the scene. The posse gave chase.

While on the run, Stegall fired a lucky shot that knocked Micajah from his horse with a severed spine. The women, who had been deserted when the chase began, were captured along with Micajah. Wiley escaped.

Thinking that Big Harpe was about to die, the posse propped him up against a tree and built a fire while they waited. He was paralyzed, but far from dead. During the long afternoon Big Harpe told the posse the story of his life; much of what we know today about their career of crime came from the lips of Big Harpe himself.

He professed to have only one regret. He had once bashed out the brains of his infant son because the child's crying had disturbed his sleep. None of his other murders seemed to bother his conscience at all. When he came to the final story, the murder of Stegall's family, the recitation was too much for Stegall to bear. Taking Big Harpe's own knife, he cut off his head. The Harpes' reign of terror had lasted just over two years.

There was a grim aftermath to the affair. The head of Micajah Harpe was later wedged into the crotch of a tree where the skull remained for many years. The spot became known as Harpe's Head, Kentucky, and the name remained long after the careers of the terrible brothers were forgotten.

The women were turned over to the authorities and brought to trial, but there was little evidence to show that they had actively participated in the crimes committed by the brothers. It speaks something for frontier justice that they were all acquitted. Eventually all three married other men and became highly respected in the communities where they lived.

Wiley Harpe disappeared, and on the Kentucky-Tennessee frontier people assumed that he was dead. Years later two men appeared before the authorities in Greenville, Mississippi with the head of Samuel Mason. Mason was wanted dead or alive, and the two men demanded the $2,000 reward offered for his delivery. The officials were not immediately able to make a positive identification of Mason, and while the two men waited for the matter to be settled, a stranger entered the courthouse. He took one look at the two men, pointed to one, and cried, "My God! That man is Wiley Harpe."

They hung Wiley in Greenville on February 4, 1804.

A New Brand in the West

Freeze-Marking Makes it Easy to Keep Track of Adopted Wild Horses

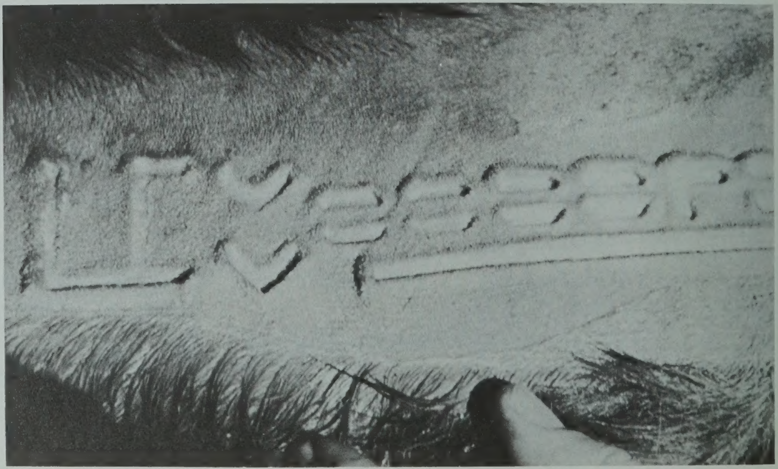
Haywood Meeks
Office of Public Affairs

Today, more than 7,000 wild horses and burros roam contentedly far from their homes on the Western range. Some are more than 2,000 miles away. They are secure in new-found homes located through the Bureau of Land Management's Adopt-a-Horse Program.

This unusual adoption program for wild horses and burros began in early 1976. Its purpose was to help preserve these historical reminders of the Old West by removing excess animals from the overgrazed public lands and placing them in the care of qualified private citizens. Two years later, wild horses and burros had been relocated to farms, military reservations, riding academies, youth homes, wildlife refuges, and various other sites across the country.

With nationwide acceptance of the Program, however, came a monumental task: keeping track of thousands of animals after their adoption. By law, adopted wild horses and burros remain wards of the Federal Government, and any transfer of custody is prohibited without written consent of BLM. This same law, the Wild Free-roaming Horses and Burros Act, also sets a maximum penaltyof a $2,000 fine or one year imprisonment, or both, for anyone who sells, trades for commercial purposes, or otherwise illegally disposes of a wild horse or burro.

Keeping tabs on adopted horses and burros was a fairly easy matter



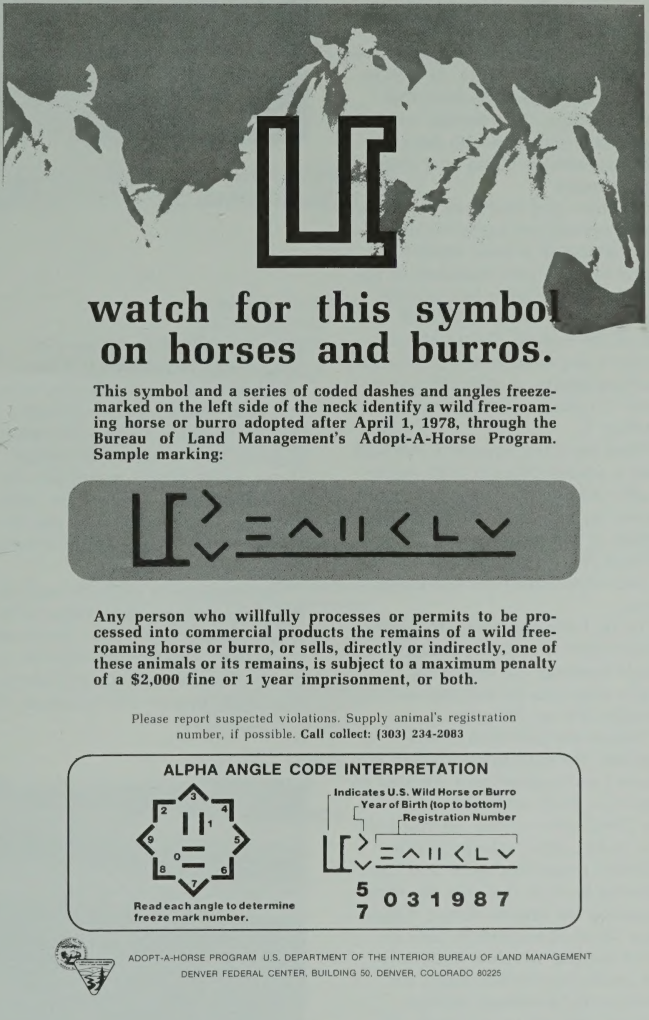
Close up view of a freeze mark on the skin of a horse. Hair is clipped to allow the cold to penetrate the tissues of the skin.

at the outset of the Adopt-a-Horse Program. Then, most animals were adopted by people in the 10 States of the Far West, the principle base of operations of the Bureau of Land Management. BLM personnel in 10 State Offices, and 53 district offices had little difficulty in monitoring the post-adoption program. Also, horse and burro protection groups and animal humane societies in the areas lent their assistance.

The situation gradually changed. When the program gained national attention through broadcast and print media, people from the Midwest, South and East filed applications to adopt animals. They were willing to travel long distances to pick up horses and burros, and foster homes could be found from the Pacific Coast to the Eastern Seaboard. At this point, BLM officials saw that some method of identifying the animals would be needed and, particularly outside the Western States, the Bureau would have to appeal to the public for its help in keeping track of adopted horses and burros.

A search for an identification system that began among agricultural schools, the livestock industry, and Federal Government agencies ended in Pullman, Washington, at the Agricultural Research Service of the U.S. Department of Agriculture. There, Dr. R. Keith Farrell, a veterinarian, had developed a method of marking animals using a series of angles and bars and based on the ancient Arabic numeral system. Dr. Farrell called his method of marketing the International Alapha Angle System.

BLM's wild horse specialists found Dr. Farrell's Angle System to be simple and precise, and that it provided good visual communication. It also readily lent itself to a computer data retrieval system, a feature especially important to BLM as a registery of adopted horses and burros was being placed in a computer in Denver, Colorado. The registry would include for each horse or burro an assigned registration number, its breed, sex, color, year of birth, place of capture, and date of adoption, the name, address and telephone of its adopter.



watch for this symbol on horses and burros.

This symbol and a series of coded dashes and angles freeze-marked on the left side of the neck identify a wild free-roaming horse or burro adopted after April 1, 1978, through the Bureau of Land Management's Adopt-A-Horse Program. Sample marking:

Any person who willfully processes or permits to be processed into commercial products the remains of a wild free-roaming horse or burro, or sells, directly or indirectly, one of these animals or its remains, is subject to a maximum penalty of a $2,000 fine or 1 year imprisonment, or both.

Please report suspected violations. Supply animal's registration number, if possible. **Call collect: (303) 234-2083**

ALPHA ANGLE CODE INTERPRETATION

3
2
4
1
9
5
0
8
6
7
Indicates U.S. Wild Horse or Burro
Year of Birth (top to bottom)
Registration Number
5
7
0 3 1 9 8 7

Read each angle to determine freeze mark number.

ADOPT-A-HORSE PROGRAM U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
DENVER FEDERAL CENTER, BUILDING 50, DENVER, COLORADO 80225

Another feature of Dr. Farrell's system that appealed to BLM personnel was the humane way in which the identification was applied to the animal. Instead of the age-old, painful method of branding with a hot iron, the identification is freeze marked on the animal using copper marking rods dipped in either liquid nitrogen or dry ice and alcohol. Unlike branding, freeze marking produces no open wound to become diseased or infested with insects. As a BLM range conservationists describes the technique, "the animal feels no more pain than a person does when his tongue sticks to a cone of ice cream."

The bars and angles in the Alpha Angle system are easily translated. The corners of a basic square represents the even numbers in the system. The number two is represented by the upper left hand corner of the square, the numbers 4, 6, and 8 are represented by the remaining angles moving clockwise from the angle representing the number 2.

Next the basic square is overlaid with a square tilted at a 45 degree angle. Odd numbers are now represented by the angles between the angles of the basic square. Two verticle lines represent the number 1; two horizontal lines represent zero.

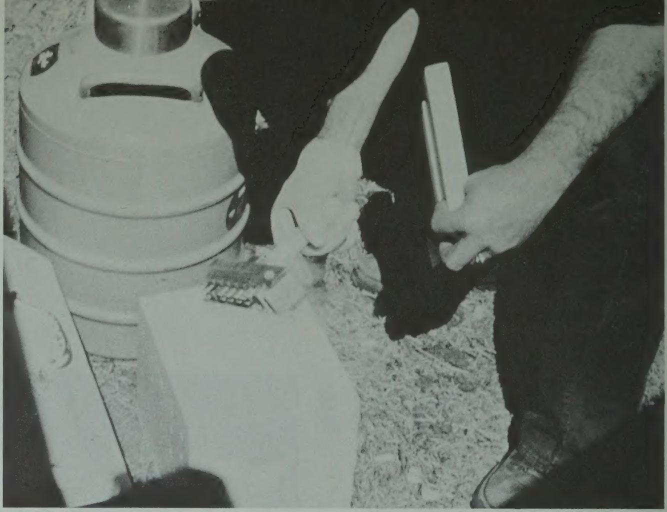
To be fully operable, the Alpha Angle method requires only a single marking rod with a right angle engraved on one end and a straight line on the other.

Before the animal is freeze marked, the area to be marked is shaved and washed with alcohol to withdraw body heat and to aid in the conduction of the intense cold. The cold copper stamp destroys pigment producing cells, and hairs growing back in the area are white. Applying the copper stamp longer than 10 to 20 seconds results in more balding which is necessary for producing legible marks on white or light-colored animals.

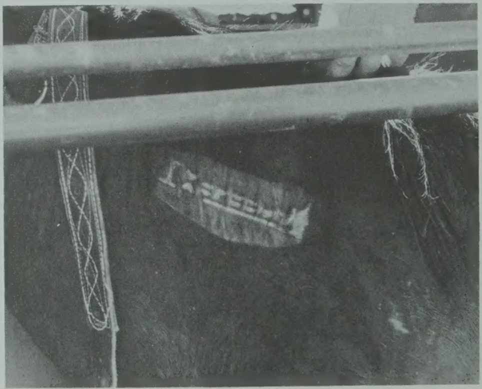
BLM officials were convinced, after tests at several holding corrals where animals awaited adoption, that they had found in the Alpha Angle system the most practical and humane method of identification. Subsequently, on April 1, 1978, the uniform marking procedure was implemented. Every wild hòrse and burro adopted after that date would wear a stylized "U" designating it as a wild horse or burro belonging to the United States. Each animal would also be marked in Alpha Angle code, with a number assigned to it on the national registry at the Adopt-a-Horse headquarters in Denver.

Simultaneously with the start of the uniform procedure, steps were taken to make the public aware of the system. Notification sent to brand inspectors, horse and burro protection organizations, groups of horse and burro fanciers, humane societies, agricultural extension agents, and regional offices of the national crime information network run by the Federal Bureau of Investigation. Most of these groups received posters for their use.

The media — publications relating to horses and burros, in particular — also were alerted to the new identification system procedure. Each received a diagram of the Alpha Angle method of marking, as well as instructions on translating the angles and bars into numerals that would identify the particular animal.



A brass rod, keyed to apply the appropriate marking is dipped into liquid nitrogen or a mixture of dry ice and alcohol. Such branding is relatively painless.



Each mark is definitive for that particular animal. The cold destroys skin pigment. Hair growing back on treated tissues is white making the marking easily readable.

Public Land Sales

No public land tracts were scheduled for sale at the time this issue went to press.

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U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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Phoenix, AZ 85073

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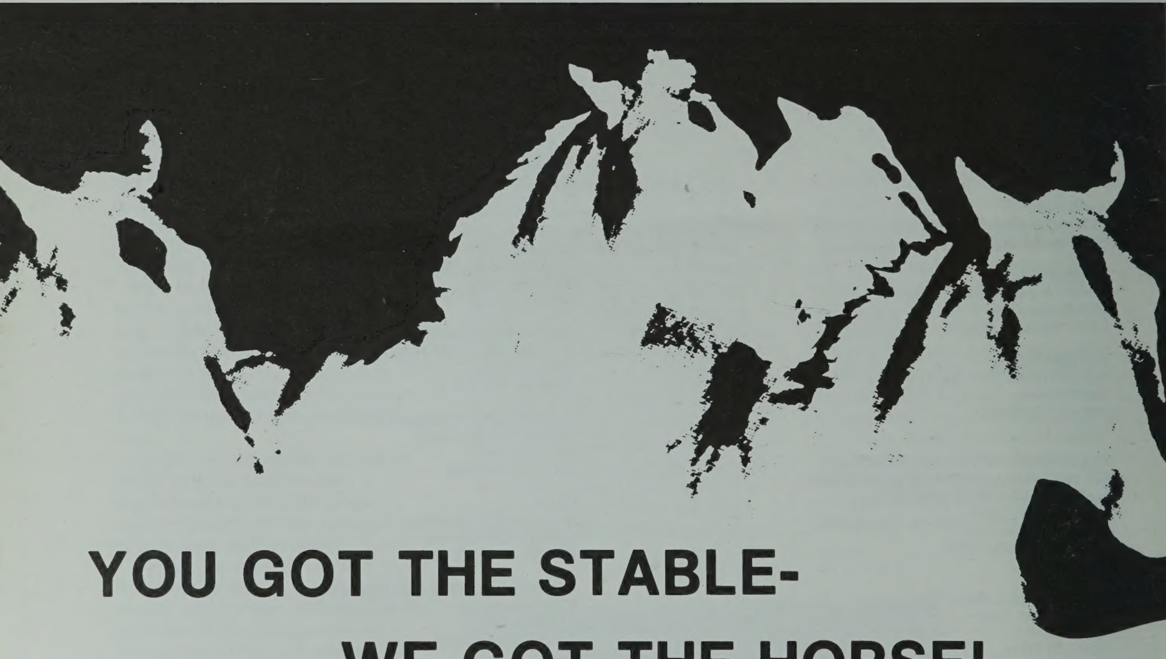

YOU GOT THE STABLE-
WE GOT THE HORSE!

BLM's Adopt-a-Horse Program seeks homes for excess wild horses--

For free details write:

Adopt-A-Horse
Bureau of Land Management
Denver Federal Center
Denver, Colorado 80225